

# HP 41 System Demo

①

## Tape Content:

Autostart  
Master  
program. →

NAME	TYPE	REGS
AUTOST	WA,S,A	336
GPIO	PR,S,A	148
INI	PR,S,A	181
DISP	PR,S,A	180
KEYS	PR,S,A	175
HPILPR	PR,S,A	170
PRDTA	DA,S	31
PLOT	PR,S	16
TIMER	PR,S,A	80
CHRONO	PR,S	129
ALARM	PR,S,A	96
XFUNC	PR,S	91
SN	PR,S,A	125
CASSET	PR,S,A	79
VIDEO	PR,S,A	171
DMM	PR,S,A	78
BCDEPR	PR,S,A	69
PRNT80	PR,S,A	71
PLTR	PR,S	116
GPIOX	PR,S,A	175

### HP-41 SYSTEM DEMO

IF TIME AND DATE ARE  
PROPERLY SET, ANSWER  
N TO THE NEXT QUESTION,  
THEN PRESS R/S.

INITL? Y/N

N

RUN

PRESS THE TOP ROW OF  
KEYS TO SELECT DESIRED  
DEMO.

THE ABBREVIATIONS IN THE  
HP-41 DISPLAY REFER TO  
INDIVIDUALLY SELECTABLE  
DEMOS THAT MAY BE ACTI-  
VATED BY PRESSING THE  
KEY BELOW IT.

D  
I  
S P  
P

# AUTOST (Type WA) : Whole calculator loading (2)

336 Regs. Page 1/2 with autostart system Demo.

```

01+LBL "NEW"
02 "DO NOT RUIN DEM"
03 "TO TAPE."
04 XEQ "0"
05 ADV
06 ADV
07 ADV
08 ADV
09 ADV
10+LBL "START"
11 "INI"
12 SF 25
13 XEQ "INI"
14 FC? 25
15 READP
16 FC?C 25
17 XEQ "INI"
18+LBL "RECOVER"
19 SF 27
20 CF 12
21 AUTOIO
22 CF 25
23+LBL 10
24 10
25 STO 40
26 " D K PR PL ↑"
27 SF 11
28 PROMPT
29 GTO 10
30 GTO 10
31+LBL A
32 "DISP"
33 GTO 00
34+LBL B
35 "KEYS"
36 GTO 00
37+LBL C
38 "HPILPR"
39 GTO 00
40+LBL D
41 "PLOT"
42 GTO 00
43+LBL "EE"
44 RCL 40
45 10
46 +
47 SF 25
48 GTO IND X
49 GTO 10
50+LBL "ee"
51 RCL 40
52 10
53 X=Y?
54 GTO 10
55 -
56 GTO IND X
57+LBL 20
58 20
59 STO 40

```

```

60 "TM SW A XF ↑"
61 SF 11
62 PROMPT
63 GTO 20
64+LBL A
65 "TIMER"
66 GTO 01
67+LBL B
68 "CHRONO"
69 GTO 01
70+LBL C
71 "ALARM"
72 GTO 01
73+LBL D
74 "XFUNC"
75 GTO 02
76+LBL 30
77 30
78 STO 40
79 " C V DM BP ↑"
80 SF 11
81 PROMPT
82 GTO 30
83+LBL A
84 "CASSET"
85 GTO 00
86+LBL B
87 "VIDEO"
88 GTO 02
89+LBL C
90 "DM"
91 GTO 00
92+LBL D
93 "BCDEPR"
94 GTO 00
95+LBL 40
96 40
97 STO 40
98 "P8 GP PM ? ↑"
99 SF 11
100 PROMPT
101 GTO 40
102+LBL A
103 "PRNT80"
104 GTO 02
105+LBL B
106 "GPIO"
107 GTO 00
108+LBL C
109 "PLTR"
110 GTO 03
111+LBL D
112 SF 21
113 "MORE INNOVATION"
114 AVIEW
115 "FROM H.P."
116 AVIEW
117 CF 21
118 GTO "EE"

```

```

119+LBL 01
120 SF 25
121 TIME
122 FS?C 25
123 GTO 00
124 "NO TIME MODULE"
125 XEQ 09
126+LBL 02
127 SF 25
128 ANUM
129 FS?C 25
130 GTO 00
131 "NO XFUM MOD"
132 XEQ 09
133+LBL 03
134 SF 25
135 CLX
136 XROM 17.22
137 FS?C 25
138 GTO 00
139 "NO PLOT MOD"
140+LBL 09
141 CF 21
142 AVIEW
143 BEEP
144 PSE
145 GTO 20
146+LBL 00
147 CF 21
148 ASTO L
149 "LOADING"
150 ARCL L
151 AVIEW
152 CLA
153 ARCL L
154 READP
155 CLD
156 SF 21
157 ADV
158 ADV
159 CLA
160 ARCL L
161 "↑ DEMO:"
162 XEQ "012"
163 ADV
164 XEQ IND L
165+LBL "RTN"
166 "END DEMO"
167 CF 21
168 AVIEW
169 SF 21
170 GTO IND 40
171 END

```

AUTO ST (Type WA)

336 Regs Page 2/2.

01\*LBL "012"  
02 SF 12  
03\*LBL "OUT"  
04\*LBL "0"  
05 SF 21  
06 FS? 55  
07 PRA  
08 CF 12  
09 FS? 55  
10 RTN  
11 CF 21  
12 AVIEW  
13 PSE  
14 RTN  
15\*LBL "Y/N?"  
16 CF 05  
17 "I? Y/N"  
18 AON  
19 PROMPT  
20 AOFF  
21 ASTO Y  
22 "Y"  
23 ASTO X  
24 X=Y?  
25 SF 05  
26 RTN  
27\*LBL "IN"  
28 CF 22  
29 ASTO Y  
30 ASHF  
31 ASTO Z  
32 CLA  
33 ARCL Y  
34 ARCL Z  
35 "I=?"  
36 PROMPT  
37 FC? 22  
38 RTN  
39 FC? 55  
40 RTN  
41 SF 21  
42 CLA  
43 ARCL Z  
44 ARCL T  
45 "I = "  
46 ARCL X  
47 PRA  
48 RTN  
49 END

# GPIO

148 Regs.  
Page 1/1

```
01*LBL "GPIO"
02 "THE HP82165A AN"
03 "FD"
04 XEQ "OUT"
05 "THE HP82166A GP"
06 "FIO"
07 XEQ "OUT"
08 "INTERFACES BRIN"
09 "FG HPIL"
10 XEQ "OUT"
11 "TO THE WORLD OF"
12 "F:"
13 XEQ "OUT"
14 ADV
15 "-DATA COLLECTIO"
16 "FN"
17 XEQ "OUT"
18 "-DEVICE CONTROL"
19 XEQ "OUT"
20 "-HOME COMPUTERS"
21 XEQ "OUT"
22 "-OEM APPLICATIO"
23 "FNS"
24 XEQ "OUT"
25 "*****"
26 "F*****"
27 XEQ "OUT"
28 ADV
29 "BOTH INTERFACES"
30 XEQ "OUT"
31 "INCORPORATE A 3"
32 "F2 BYTE"
33 XEQ "OUT"
34 "FIFO BUFFER FOR"
35 XEQ "OUT"
36 "INCREASED THROU"
37 "FGHPUT."
38 XEQ "OUT"
39 ADV
40 "APPLICATIONS:"
41 XEQ "OUT"
42 ADV
43 "--THE 82165A CAN"
44 "F CONNECT"
45 XEQ "OUT"
46 "TO MANY PERSONA"
47 "FL"
48 XEQ "OUT"
49 "COMPUTERS, AND "
```

```
50 "FLARGER"
51 XEQ "OUT"
52 "MAINFRAME COMPU"
53 "FTERS"
54 XEQ "OUT"
55 "OVER THEIR PARA"
56 "LLEL"
57 XEQ "OUT"
58 "INTERFACE PORT "
59 "FTHUS"
60 XEQ "OUT"
61 "GIVING YOUR MAC"
62 "FHINE"
63 XEQ "OUT"
64 "HPIL COMPATIBIL"
65 "FITY."
66 XEQ "OUT"
67 " ALSO, IT CAN"
68 "F BE"
69 XEQ "OUT"
70 "CONNECTED TO MO"
71 "FST"
72 XEQ "OUT"
73 "PRINTERS AVAILA"
74 "FBLE"
75 XEQ "OUT"
76 "ALLOWING YOUR S"
77 "FTANDARD"
78 XEQ "OUT"
79 "SIZED PRINTER T"
80 "FHAT YOU"
81 XEQ "OUT"
82 "MAY ALREADY OWN"
83 "F TO DO"
84 XEQ "OUT"
85 "YOUR PRINTING."
86 XEQ "OUT"
87 ADV
88 "--THE 82166A IS "
89 "FMEANT FOR"
90 XEQ "OUT"
91 "OEM CUSTOMERS W"
92 "FHO WISH"
93 XEQ "OUT"
94 "TO DESIGN HPIL "
95 XEQ "OUT"
96 "CAPABILITIES IN"
97 "FTO THEIR "
98 XEQ "OUT"
99 "PRODUCTS WITH M"
100 "FINIMAL"
101 XEQ "OUT"
102 "DEVELOPEMENT CO"
103 "FSTS AND"
104 XEQ "OUT"
105 "HP SUPPORT."
106 XEQ "OUT"
107 ADV
108 ADV
109 ADV
110 ADV
111 "END DEMO"
112 XEQ "OUT"
113 XEQ "RTN"
114 .END.
```

Program Run:

THE HP82165A AND  
THE HP82166A GPIO  
INTERFACES BRING HPIL  
TO THE WORLD OF:

- DATA COLLECTION
- DEVICE CONTROL
- HOME COMPUTERS
- OEM APPLICATIONS

\*\*\*\*\*

BOTH INTERFACES  
INCORPORATE A 32 BYTE  
FIFO BUFFER FOR  
INCREASED THROUGHPUT.

APPLICATIONS:

-THE 82165A CAN CONNECT  
TO MANY PERSONAL  
COMPUTERS, AND LARGER  
MAINFRAME COMPUTERS  
OVER THEIR PARALLEL  
INTERFACE PORT THUS  
GIVING YOUR MACHINE  
HPIL COMPATIBILITY.

ALSO, IT CAN BE  
CONNECTED TO MOST  
PRINTERS AVAILABLE  
ALLOWING YOUR STANDARD  
SIZED PRINTER THAT YOU  
MAY ALREADY OWN TO DO  
YOUR PRINTING.

-THE 82166A IS MEANT FOR  
OEM CUSTOMERS WHO WISH  
TO DESIGN HPIL  
CAPABILITIES INTO THEIR  
PRODUCTS WITH MINIMAL  
DEVELOPEMENT COSTS AND  
HP SUPPORT.

END DEMO

INI  
181 Regs.  
Page 1/2

01+LBL "INI"  
02 2  
03 SELECT  
04 "SEE PRINTER"  
05 CF 21  
06 FS? 55  
07 AVIEW  
08 FS? 55  
09 SF 21  
10 " HP-41"  
11 XEQ "012"  
12 "SYSTEM DEMO"  
13 XEQ "012"  
14 ADV  
15 TIME  
16 FC? 25  
17 GTO 01  
18 "IF TIME AND DAT"  
19 "HE ARE"  
20 XEQ "OUT"  
21 "PROPERLY SET, A"  
22 "ANSWER"  
23 XEQ "OUT"  
24 "N TO THE NEXT Q"  
25 "QUESTION,"  
26 XEQ "OUT"  
27 "THEN PRESS R/S."  
28 XEQ "OUT"  
29 ADV  
30 ADV  
31 ADV  
32 ADV  
33 ADV  
34 "INITL"  
35 XEQ "Y/N?"  
36 FC? 05  
37 GTO 01  
38 CF 28  
39 "USA DSP"  
40 XEQ "Y/N?"  
41 FS? 05  
42 SF 28  
43 SF 25  
44 TIME  
45 FC?C 25  
46 RTN

47 FIX 0  
48 CF 29  
49 "SET TIME"  
50 CF 21  
51 AVIEW  
52 BEEP  
53 PSE  
54 "HR"  
55 XEQ "IN"  
56 STO 01  
57 "MIN"  
58 XEQ "IN"  
59 1 E2  
60 /  
61 RCL 01  
62 +  
63 STO 01  
64 "PM"  
65 XEQ "Y/N?"  
66 RCL 01  
67 FS? 05  
68 CHS  
69 SF 25  
70 SETIME  
71 "SET DATE"  
72 CF 21  
73 AVIEW  
74 BEEP  
75 PSE  
76 MDY  
77 "MONTH"  
78 XEQ "IN"  
79 STO 01  
80 "DAY"  
81 XEQ "IN"  
82 STO 02  
83 "YEAR"  
84 XEQ "IN"  
85 1 E2  
86 /  
87 FRC  
88 19  
89 +  
90 1 E4  
91 /  
92 RCL 02  
93 1 E2  
94 /  
95 +  
96 RCL 01  
97 +  
98 SETDATE  
99+LBL 01  
100 ADV  
101 "PRESS THE TOP "  
102 "FROM OF"  
103 XEQ "OUT"  
104 "KEYS TO SELECT "  
105 "DESIRE"  
106 XEQ "OUT"  
107 "DEMO."  
108 XEQ "OUT"  
109 ADV

110 "THE ABBREVIATIO"  
111 "INS IN THE"  
112 XEQ "OUT"  
113 "HP-41 DISPLAY R"  
114 "REFER TO"  
115 XEQ "OUT"  
116 "INDIVIDUALLY SELE"  
117 "TABLE"  
118 XEQ "OUT"  
119 "DEMOS THAT MAY "  
120 "BE ACTI-"  
121 XEQ "OUT"  
122 "ATED BY PRESSI"  
123 "ING THE"  
124 XEQ "OUT"  
125 "KEY BELOW IT."  
126 XEQ "OUT"  
127 ADV  
128 " D"  
129 PRA  
130 " I"  
131 PRA  
132 " S"  
133 ACA  
134 INSREC  
135 " P"  
136 ACA  
137 PRBUF  
138 ACA  
139 INSREC  
140 "R"  
141 ACA  
142 PRBUF  
143 " L"  
144 ACA  
145 INSREC  
146 "E"  
147 ACA  
148 PRBUF  
149 " A"  
150 ACA  
151 INSREC  
152 "S"  
153 ACA  
154 PRBUF  
155 " Y DEMO"  
156 ACA  
157 INSREC  
158 "S"  
159 ACA  
160 PRBUF  
161 "-----"  
162 "t-----"  
163 PRA  
164 ADV  
165 " D DISPLAY"  
166 ACA  
167 INSREC  
168 "A"  
169 ACA  
170 PRBUF  
171 " K KEYS"  
172 ACA  
173 INSREC

INi

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174 "B"  
175 ACA  
176 PRBUF  
177 "PR PRINTER"  
178 ACA  
179 INSREC  
180 "C"  
181 ACA  
182 PRBUF  
183 "PL PRINT PLOT"  
184 ACA  
185 INSREC  
186 "D"  
187 ACA  
188 PRBUF  
189 ADV  
190 "TM TIME MODULE"  
191 ACA  
192 INSREC  
193 "A"  
194 ACA  
195 PRBUF  
196 "SW STOP WATCH"  
197 ACA  
198 INSREC  
199 "B"  
200 ACA  
201 PRBUF  
202 "A ALARM"  
203 ACA  
204 INSREC  
205 "C"  
206 ACA  
207 PRBUF  
208 "XF EXTENDED FUN"  
209 "FUNCTIONS D"  
210 PRA  
211 ADV  
212 "C CASSETTE DRI"  
213 "EYE"  
214 ACA  
215 INSREC  
216 "A"  
217 ACA  
218 PRBUF  
219 "V VIDEO INTERF"  
220 "FACE"  
221 ACA  
222 INSREC  
223 "B"  
224 ACA  
225 PRBUF  
226 "DM DIGITAL MULT"  
227 "METER C"  
228 PRA  
229 "BP BAR CODE,PR"  
230 ACA  
231 INSREC  
232 "D"  
233 ACA  
234 PRBUF  
235 ADV  
236 "P8 80 COL PRINT"  
237 "ER"  
238 ACA  
239 INSREC

INi  
181 Regs  
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240 "A"  
241 ACA  
242 PRBUF  
243 "GP GPIO INTERFA"  
244 "FCE"  
245 ACA  
246 INSREC  
247 "B"  
248 ACA  
249 PRBUF  
250 "PM PLOTTER MODU"  
251 "ELE"  
252 ACA  
253 INSREC  
254 "C"  
255 ACA  
256 PRBUF  
257 " ? FUTURE DEVIC"  
258 "E"  
259 ACA  
260 INSREC  
261 "D"  
262 ACA  
263 PRBUF  
264 ADV  
265 "PRESS THE E KEY"  
266 "F FOR MORE"  
267 XEQ "OUT"  
268 "DEMO CHOICES."  
269 XEQ "OUT"  
270 ADV  
271 "PRESS THE GOLD "  
272 "FKEY THEN"  
273 XEQ "OUT"  
274 "THE E KEY FOR "  
275 "FPREVIOUS"  
276 XEQ "OUT"  
277 "KEY LABELS."  
278 XEQ "OUT"  
279 ADV  
280 ADV  
281 ADV  
282 ADV  
283 1  
284 SELECT  
285 SF 25  
286 RTN  
287 .END.

Program run.

# HP-41 SYSTEM DEMO

IF TIME AND DATE ARE  
PROPERLY SET, ANSWER  
N TO THE NEXT QUESTION,  
THEN PRESS R/S.

PRESS THE TOP ROW OF  
KEYS TO SELECT DESIRED  
DEMO.

THE ABBREVIATIONS IN THE  
HP-41 DISPLAY REFER TO  
INDIVIDUALLY SELECTABLE  
DEMOS THAT MAY BE ACTI-  
VATED BY PRESSING THE  
KEY BELOW IT.

D  
I  
S P  
P

... and more.

01+LBL "DISP"  
02 CF 13  
03 SF 26  
04 FS? 55  
05 SF 21  
06 BEEP  
07 "I AM THE HP-41"  
08 "I AND I"  
09 XEQ 99  
10 "LIKE TO COMMUNI"  
11 "I-CATE"  
12 XEQ 99  
13 "WITH YOU..."  
14 XEQ 99  
15 PSE  
16 "PLEASE TYPE IN"  
17 "I YOUR"  
18 XEQ 99  
19 "FIRST NAME AND "  
20 "I-PRESS R/S"  
21 XEQ 99  
22 CLD  
23 CLD  
24 TONE 9  
25 AON  
26 STOP  
27 AOFF  
28 ASTO 01  
29 ASHF  
30 ASTO 02  
31 ASHF  
32 ASTO 03  
33 "THANKS "  
34 ARCL 01  
35 ARCL 02  
36 ARCL 03  
37 ADV  
38 XEQ 99  
39 ADV  
40 "LET US NOW SEE "  
41 "HOW MY"  
42 XEQ 99  
43 "ALPHANUMERIC DI"  
44 "I-SPLAY"  
45 XEQ 99  
46 "HELPS YOU WHEN "  
47 "I-YOU RUN"  
48 XEQ 99  
49 "A PROGRAM"  
50 XEQ 99  
51 ADV  
52 "NOW WATCH THE D"  
53 "I-SPLAY"  
54 XEQ 99  
55 ADV

56 "1. INPUT PROMPT"  
57 "I-ING"  
58 XEQ 99  
59 SF 13  
60 " NUMERIC"  
61 XEQ 99  
62 PSE  
63 PSE  
64 CF 13  
65 CF 21  
66 "TEMPERATURE?"  
67 TONE 4  
68 XEQ 99  
69 PSE  
70 "INCOME ?"  
71 TONE 5  
72 XEQ 99  
73 "BEAM LENGTH?"  
74 TONE 6  
75 XEQ 99  
76 "OXYGEN SAT.?"  
77 TONE 7  
78 XEQ 99  
79 "ALTITUDE ?"  
80 TONE 8  
81 XEQ 99  
82 "FREQUENCY ?"  
83 TONE 9  
84 XEQ 99  
85 SF 13  
86 FS? 55  
87 SF 21  
88 CLD  
89 " ALPHA"  
90 XEQ 99  
91 PSE  
92 CF 13  
93 CF 21  
94 "MM/INCH ?"  
95 TONE 4  
96 XEQ 99  
97 "YES/NO ?"  
98 TONE 5  
99 XEQ 99  
100 "BIRTH DATE ?"  
101 TONE 6  
102 XEQ 99  
103 "PART NUMBER?"  
104 TONE 7  
105 XEQ 99  
106 "PRINT/PLOT ?"  
107 TONE 8  
108 XEQ 99  
109 "LEASE/BUY ?"  
110 TONE 9  
111 XEQ 99  
112 FS? 55  
113 SF 21  
114 CLD  
115 "2. OUTPUT LABEL"  
116 "I-ING"  
117 XEQ 99  
118 SF 13  
119 " DOCUMENTED A"  
120 "I-NSWERS"  
121 XEQ 99

122 PSE  
123 CF 13  
124 CF 21  
125 "5.2 METER"  
126 TONE 0  
127 XEQ 99  
128 "37 DEGREES C"  
129 TONE 1  
130 XEQ 99  
131 "TAX=18.5 %"  
132 TONE 2  
133 XEQ 99  
134 "R2=10K OHM"  
135 TONE 3  
136 XEQ 99  
137 "NO ROOT FOUND"  
138 TONE 4  
139 XEQ 99  
140 "CREDIT REFUSED"  
141 TONE 5  
142 XEQ 99  
143 "PRICE IS \$10"  
144 TONE 6  
145 XEQ 99  
146 "Z-FACTOR= OK"  
147 TONE 7  
148 XEQ 99  
149 "XYZ IN STOCK"  
150 TONE 8  
151 XEQ 99  
152 "VOLUME=2 M13"  
153 TONE 9  
154 XEQ 99  
155 FS? 55  
156 SF 21  
157 CLD  
158 "3. STATUS INDIC"  
159 "I-ATION"  
160 XEQ 99  
161 SF 13  
162 " BATTERY"  
163 XEQ 99  
164 " USER KEYBOARD"  
165 "I-D"  
166 XEQ 99  
167 " TRIG. MODE"  
168 XEQ 99  
169 " FLAG STATUS "  
170 "I-0 TO 4"  
171 XEQ 99  
172 " PROGRAM MODE"  
173 XEQ 99  
174 " ALPHA KEYBOA"  
175 "I-RD"  
176 XEQ 99  
177 PSE  
178 CF 13  
179 CF 21  
180 CF 27  
181 CLD  
182 AVIEW  
183 SF 27  
184 TONE 9  
185 SIN  
186 CF 27  
187 SIN

Program Run:

188 RAD  
189 TONE 9  
190 SIN  
191 DEG  
192 SIN  
193 GRAD  
194 TONE 9  
195 SIN  
196 DEG  
197 .004  
198 STO 00  
199 \*LBL 01  
200 SF IND 00  
201 TONE 9  
202 SIN  
203 CF IND 00  
204 ISG 00  
205 GTO 01  
206 AON  
207 TONE 9  
208 SIN  
209 AOFF  
210 SIN  
211 CLD  
212 SF 27  
213 FS? 55  
214 SF 21  
215 "4. MEANINGFUL M"  
216 "MESSAGES"  
217 XEQ 99  
218 SF 13  
219 " BUILT IN ERR"  
220 "FOR RE-"  
221 XEQ 99  
222 " PORTING AND "  
223 "STATUS"  
224 XEQ 99  
225 " MESSAGES"  
226 XEQ 99  
227 PSE  
228 CF 13  
229 CF 21  
230 "ALPHA DATA"  
231 TONE 6  
232 XEQ 99  
233 "DATA ERROR"  
234 TONE 6  
235 XEQ 99  
236 "MEMORY LOST"  
237 TONE 6  
238 XEQ 99  
239 "NONEXISTENT"  
240 TONE 6  
241 XEQ 99  
242 "OUT OF RANGE"  
243 TONE 6  
244 XEQ 99

245 "PRIVATE"  
246 TONE 6  
247 XEQ 99  
248 "PACKING"  
249 TONE 6  
250 XEQ 99  
251 FS? 55  
252 SF 21  
253 BEEP  
254 CLD  
255 RTN  
256 \*LBL 99  
257 FS? 21  
258 AVIEW  
259 FC? 21  
260 AVIEW  
261 FC? 21  
262 SIN  
263 FC? 21  
264 SIN  
265 RTN  
266 .END.

I AM THE HP-41 AND I  
LIKE TO COMMUNICATE  
WITH YOU...  
PLEASE TYPE IN YOUR  
FIRST NAME AND PRESS R/S

THANKS ETIENNE

LET US NOW SEE HOW MY  
ALPHANUMERIC DISPLAY  
HELPS YOU WHEN YOU RUN  
A PROGRAM

NOW WATCH THE DISPLAY

1. INPUT PROMPTING
  - numeric
  - alpha
2. OUTPUT LABELING
  - documented answers
3. STATUS INDICATION
  - battery
  - user keyboard
  - trig. mode
  - flag status 0 to 4
  - program mode
  - alpha keyboard
4. MEANINGFUL MESSAGES
  - built in error re-  
porting and status  
messages

...and much  
more on  
the display.



01+LBL "KEYS"  
02 FIX 4  
03 XEQ "WP"  
04 "THE HP-41 HAS A"  
05 "F. UNIQUE"  
06 XEQ "0"  
07 "FEATURE BY WHIC"  
08 "FH YOU"  
09 XEQ "0"  
10 "CAN REDEFINE TH"  
11 "FE ENTIRE"  
12 XEQ "0"  
13 "KEYBOARD"  
14 "F."  
15 XEQ "0"  
16 ADV  
17 "THIS FRIENDLY F"  
18 "FEATURE"  
19 XEQ "0"  
20 "ALLOWS YOU TO:"  
21 XEQ "0"  
22 "I ADAPT THE KEY"  
23 "BOARD"  
24 XEQ "0"  
25 " TO YOUR NEEDS"  
26 "F."  
27 XEQ "0"  
28 "2 ASSIGN OFTEN "  
29 "USED"  
30 XEQ "0"  
31 " FUNCTIONS FRO"  
32 "FM CAL-"  
33 XEQ "0"  
34 " CULATOR AND P"  
35 "PLUG-IN"  
36 XEQ "0"  
37 " PERIPHERALS"  
38 "F."  
39 XEQ "0"  
40 "3 AID UNSKILLED"  
41 XEQ "0"  
42 " USERS IN CUST"  
43 "OMIZED"  
44 XEQ "0"  
45 " APPLICATIONS"  
46 "F."  
47 XEQ "0"  
48 ADV  
49 "NOW LETS SEE TH"  
50 "FE EFFECT"  
51 XEQ "0"  
52 "OF THE ASSIGNAB"  
53 "FLE KEY-"  
54 XEQ "0"

55 "BOARD"  
56 "F AND USER MODE"  
57 "F."  
58 XEQ "0"  
59 ADV  
60 "USER MODE IS IN"  
61 "F-DICATED"  
62 XEQ "0"  
63 "BY ANNUNCIATORS"  
64 "F IN THE"  
65 XEQ "0"  
66 "DISPLAY."  
67 XEQ "0"  
68 ADV  
69 XEQ "WATCH"  
70 5  
71 CLA  
72 AVIEW  
73+LBL 01  
74 SF 27  
75 TONE 1  
76 CF 27  
77 TONE 9  
78 DSE X  
79 GTO 01  
80 XEQ "WP"  
81 "USER MODE ALLOW"  
82 "FS YOU"  
83 XEQ "0"  
84 "TO DESIGN A CAL"  
85 "F-CULATOR"  
86 XEQ "0"  
87 "FOR YOUR NEEDS."  
88 XEQ "0"  
89 ADV  
90 "SWITCHING OUT 0"  
91 "F USER"  
92 XEQ "0"  
93 "MODE RETURNS FU"  
94 "F-NCTION TO"  
95 XEQ "0"  
96 "DEFAULT CONFIGU"  
97 "F-RATION."  
98 XEQ "0"  
99 ADV  
100 XEQ "WATCH"  
101 CF 21  
102 5  
103+LBL 02  
104 "YOUR DESIGN"  
105 SF 27  
106 AVIEW  
107 TONE 1  
108 PSE  
109 "HP DESIGN"  
110 CF 27  
111 AVIEW  
112 TONE 9  
113 PSE  
114 DSE X  
115 GTO 02  
116 CF 27  
117 XEQ "WP"  
118 "WITH USER MODE "  
119 "F-OFF TRY"

120 XEQ "0"  
121 "THE SIN FUNCTIO"  
122 "FN. NOTE"  
123 XEQ "0"  
124 "THAT IF YOU HOL"  
125 "FD THE KEY"  
126 XEQ "0"  
127 "DOWN THE FUNCTI"  
128 "FON NAME"  
129 XEQ "0"  
130 "IS DISPLAYED."  
131 XEQ "0"  
132 ADV  
133 "HOLDING THE KEY"  
134 "F LONGER"  
135 XEQ "0"  
136 "WILL CAUSE THE "  
137 "F-KEY TO"  
138 XEQ "0"  
139 "BE IGNORED OR N"  
140 "FULLED."  
141 XEQ "0"  
142 ADV  
143 "TRY THE SIN FUN"  
144 "F-NCTION."  
145 XEQ "0"  
146 "PRESS R/S TO CO"  
147 "FNTINUE."  
148 XEQ "0"  
149 ADV  
150 45  
151 CLD  
152 STOP  
153 XEQ "WP"  
154 SF 27  
155 "TRY THE SIN KEY"  
156 "F AGAIN"  
157 XEQ "0"  
158 "WITH USER MODE "  
159 "F-SET."  
160 XEQ "0"  
161 ADV  
162 45  
163 CLD  
164 STOP  
165+LBL "NOTSIN"  
166 CF 21  
167 "NOT SIN NOW"  
168 AVIEW  
169 BEEP  
170 BEEP  
171 "END DEMO"  
172 AVIEW  
173 PSE  
174 GTO "RECOVER"  
175 RTN  
176+LBL "WATCH"  
177 "WATCH THE DISPL"  
178 "FAY."  
179 XEQ "0"  
180 ADV  
181 RTN  
182+LBL "WP"  
183 "SEE PRINTER"  
184 CF 21

185 FS? 55  
186 AVIEW  
187 FS? 55  
188 SF 21  
189 RTN  
190 .END.

01\*LBL "HPILPR"  
02 CF 21  
03 "SEE PRINTER"  
04 AVIEW  
05 SF 21  
06 2  
07 SELECT  
08 ADV  
09 "THE HP82162A"  
10 XEQ "012"  
11 INSREC  
12 "PRINTER/PLOTTER"  
13 ACA  
14 PRBUF  
15 XEQ "IL"  
16 "COMPATIBLE WITH"  
17 "H PRESENT"  
18 XEQ "0"  
19 "AND FUTURE HP-I"  
20 "H DEVICES"  
21 XEQ "0"  
22 ADV  
23 "AN INVESTMENT I"  
24 "H THE"  
25 XEQ "0"  
26 "FUTURE"  
27 XEQ "0"  
28 ADV  
29 "KEY FEATURES"  
30 XEQ "012"  
31 "-COMPATIBLE WIT"  
32 "H THE"  
33 XEQ "0"  
34 " HP 82143A PRIN"  
35 "TER"  
36 XEQ "0"  
37 "-96 ASCII STAND"  
38 "HARD CHAR."  
39 XEQ "0"  
40 "-127 HP-41 COMP"  
41 "HATIBLE"  
42 XEQ "0"  
43 " CHARACTERS"  
44 XEQ "0"  
45 XEQ "CH"  
46 ADV  
47 "-USER DEFINED S"  
48 "HPECIAL"  
49 XEQ "0"  
50 " CHARACTERS"  
51 XEQ "0"  
52 CF 21

53 "READING DATA"  
54 AVIEW  
55 "PRDTA"  
56 READR  
57 CLD  
58 SF 21  
59 SF 12  
60 ADV  
61 RCL 04  
62 ACSPEC  
63 RCL 05  
64 ACSPEC  
65 RCL 06  
66 ACSPEC  
67 PRBUF  
68 ADV  
69 RCL 03  
70 ACSPEC  
71 CF 12  
72 " BELL SYSTEM"  
73 ACA  
74 PRBUF  
75 ADV  
76 RCL 13  
77 ACSPEC  
78 RCL 14  
79 ACSPEC  
80 RCL 15  
81 ACSPEC  
82 CF 12  
83 " CHEVROLET"  
84 ACA  
85 PRBUF  
86 ADV  
87 "-SINGLE WIDTH A"  
88 "HND"  
89 XEQ "0"  
90 "DOUBLE WIDTH"  
91 XEQ "012"  
92 ADV  
93 "-UPPER CASE AND"  
94 XEQ "0"  
95 SF 13  
96 " LOWER CASE"  
97 XEQ "0"  
98 ADV  
99 CF 13  
100 "-FORMATED OUTPU"  
101 "H"  
102 XEQ "0"  
103 "CENTERED"  
104 ACA  
105 INSREC  
106 ADV  
107 "LEFT"  
108 ACA  
109 INSREC  
110 "RIGHT"  
111 ACA  
112 PRBUF  
113 CLX

114 ADV  
115 ADV  
116 ADV  
117 ADV  
118 "END DEMO"  
119 AVIEW  
120 1  
121 SELECT  
122 RTN  
123\*LBL "CH"  
124 SF 12  
125 ADV  
126 " "  
127 1  
128 ENTER↑  
129 ENTER↑  
130 ENTER↑  
131 .02  
132 STO 00  
133\*LBL 05  
134 ACCHR  
135 ACA  
136 +  
137 ACCHR  
138 ACA  
139 +  
140 ACCHR  
141 ACA  
142 +  
143 ACCHR  
144 ACA  
145 +  
146 ACCHR  
147 ACA  
148 +  
149 ACCHR  
150 ACA  
151 +  
152 PRBUF  
153 ISG 00  
154 GTO 05  
155 ACCHR  
156 ACA  
157 +  
158 ACCHR  
159 ACA  
160 +  
161 PRBUF  
162 CF 12  
163 RTN  
164\*LBL "IL"  
165 SF 12  
166 ADV  
167 127  
168 ACCOL  
169 0  
170 ENTER↑  
171 3  
172 BLD SPEC  
173 LASTX  
174 BLD SPEC  
175 LASTX  
176 BLD SPEC  
177 LASTX  
178 BLD SPEC

179 LASTX	240 47	302 RCL 00
180 BLDSPEC	241 SKPCOL	303 127
181 LASTX	242 127	304 BLDSPEC
182 BLDSPEC	243 SF 12	305 ACSPEC
183 LASTX	244 ACCOL	306 33
184 BLDSPEC	245 PRBUF	307 SKPCOL
185 STO 03	246 ACCOL	308 127
186 ACSPEC	247 INSREC	309 ACCOL
187 ACSPEC	248 ACCOL	310 47
188 ACSPEC	249 33	311 CF 12
189 ACSPEC	250 SKPCOL	312 SKPCOL
190 ACSPEC	251 RDN	313 RDN
191 ACSPEC	252 ACCOL	314 SF 12
192 ACSPEC	253 47	315 ACCOL
193 ACSPEC	254 CF 12	316 PRBUF
194 ACSPEC	255 SKPCOL	317 ACCOL
195 ACSPEC	256 SF 12	318 48
196 ACSPEC	257 RDN	319 ACCOL
197 CF 12	258 ACCOL	320 24
198 ACSPEC	259 PRBUF	321 ACCOL
199 LASTX	260 ACCOL	322 12
200 ACCOL	261 INSREC	323 ACCOL
201 SF 12	262 64	324 6
202 ACCOL	263 ACCOL	325 ACCOL
203 127	264 48	326 3
204 ACCOL	265 ACCOL	327 ACCOL
205 PRBUF	266 24	328 1
206 ACCOL	267 ACCOL	329 ACCOL
207 INSREC	268 15	330 RCL 01
208 "HP-IL"	269 ACCOL	331 ACSPEC
209 ACA	270 33	332 INSREC
210 CF 12	271 SKPCOL	333 RCL 03
211 47	272 127	334 ACSPEC
212 SKPCOL	273 ACCOL	335 ACSPEC
213 SF 12	274 47	336 ACSPEC
214 RDN	275 CF 12	337 ACSPEC
215 ACCOL	276 SKPCOL	338 ACSPEC
216 PRBUF	277 SF 12	339 CF 12
217 ACCOL	278 RDN	340 47
218 INSREC	279 ACCOL	341 SKPCOL
219 96	280 PRBUF	342 127
220 BLDSPEC	281 ACCOL	343 SF 12
221 LASTX	282 INSREC	344 ACCOL
222 BLDSPEC	283 0	345 PRBUF
223 LASTX	284 ENTER†	346 8
224 BLDSPEC	285 64	347 ACCOL
225 LASTX	286 BLDSPEC	348 54
226 BLDSPEC	287 48	349 ACCOL
227 LASTX	288 BLDSPEC	350 99
228 BLDSPEC	289 24	351 ACCOL
229 LASTX	290 BLDSPEC	352 65
230 BLDSPEC	291 12	353 ACCOL
231 LASTX	292 BLDSPEC	354 INSREC
232 BLDSPEC	293 6	355 127
233 STO 04	294 BLDSPEC	356 ACCOL
234 ACSPEC	295 3	357 PRBUF
235 ACSPEC	296 BLDSPEC	358 SF 12
236 ACSPEC	297 STO 00	359 7
237 ACSPEC	298 1	360 SKPCOL
238 ACSPEC	299 BLDSPEC	361 1
239 CF 12	300 STO 01	362 ACCOL
	301 ACSPEC	363 3
		364 ACCOL

# PLOT

16 Regs

12

365 6  
366 ACCOL  
367 12  
368 ACCOL  
369 24  
370 ACCOL  
371 48  
372 ACCOL  
373 64  
374 ACCOL  
375 10  
376 SKPCOL  
377 RCL 04  
378 ACSPEC  
379 ACSPEC  
380 ACSPEC  
381 ACSPEC  
382 ACSPEC  
383 ACSPEC  
384 ACSPEC  
385 ACSPEC  
386 96  
387 CF 12  
388 ACCOL  
389 ACCOL  
390 ACCOL  
391 ACCOL  
392 ACCOL  
393 ACCOL  
394 SF 12  
395 127  
396 ACCOL  
397 PRBUF  
398 CF 12  
399 37  
400 SKPCOL  
401 SF 12  
402 1  
403 ACCOL  
404 3  
405 ACCOL  
406 6  
407 ACCOL  
408 12  
409 ACCOL  
410 24  
411 ACCOL  
412 48  
413 ACCOL  
414 127  
415 ACCOL  
416 PRBUF  
417 CF 12  
418 RTN  
419 .END.

01+LBL "PLOT"  
02 2  
03 SELECT  
04 CF 21  
05 "SEE PRINTER"  
06 AVIEW  
07 SF 21  
08 DEG  
09 1  
10 STO 01  
11 CHS  
12 STO 00  
13 STO 03  
14 CLX  
15 STO 04  
16 540  
17 STO 09  
18 CHS  
19 STO 08  
20 30  
21 STO 10  
22 "SINX/X"  
23 ASTO 11  
24 XROM "PRPLOTP"  
25 ADV  
26 ADV  
27 "END DEMO"  
28 AVIEW  
29 ADV  
30 ADV  
31 RTN  
32+LBL "SINX/X"  
33 X=0?  
34 GTO 00  
35 SIN  
36 LASTX  
37 D-R  
38 /  
39 RTN  
40+LBL 00  
41 1  
42 RTN  
43 .END.

# TIMER

80 Regs

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13

01+LBL "TIMER"  
02 "SEE PRINTER"  
03 FS? 55  
04 AVIEW  
05 CF 29  
06 CLKT  
07 CLK12  
08+LBL 01  
09 FIX 2  
10 "IT IS NOW:"  
11 XEQ "OUT"  
12 TIME  
13 CLA  
14 ATIME  
15 XEQ "OUT"  
16 BEEP  
17 ADV  
18 "THE DATE IS:"  
19 XEQ "OUT"  
20 CLA  
21 FIX 6  
22 DATE  
23 ADATE  
24 XEQ "OUT"  
25 BEEP  
26 ADV  
27 "FORMATS"  
28 XEQ "OUT"  
29 ADV  
30 "12 HR MODE:"  
31 XEQ "OUT"  
32 FIX 4  
33 TIME  
34 CLA  
35 ATIME  
36 XEQ "OUT"  
37 12  
38 T+X  
39 TIME  
40 CLA  
41 ATIME  
42 XEQ "OUT"  
43 ADV  
44 "24 HR MODE:"  
45 XEQ "OUT"  
46 TIME  
47 CLA  
48 ATIME24  
49 XEQ "OUT"  
50 12  
51 CHS  
52 T+X  
53 TIME  
54 CLA  
55 ATIME24  
56 XEQ "OUT"  
57 ADV  
58 MDY  
59 "MM/DD/YY:"  
60 XEQ "OUT"  
61 DATE  
62 CLA  
63 ADATE  
64 XEQ "OUT"

65 ADV  
66 "MM/DD/YYYY:"  
67 XEQ "OUT"  
68 FIX 6  
69 DATE  
70 CLA  
71 ADATE  
72 XEQ "OUT"  
73 ADV  
74 "DD.MM.YY:"  
75 XEQ "OUT"  
76 DMY  
77 DATE  
78 CLA  
79 DMY  
80 FIX 4  
81 ADATE  
82 XEQ "OUT"  
83 ADV  
84 "DD.MM.YYYY:"  
85 XEQ "OUT"  
86 DATE  
87 CLA  
88 FIX 6  
89 ADATE  
90 XEQ "OUT"  
91 ADV  
92 ADV  
93 "DAY OF WEEK:"  
94 XEQ "OUT"  
95 DATE  
96 DOW  
97 "TODAY IS "  
98 0  
99 X=Y?  
100 "1-SUNDAY"  
101 RDN  
102 1  
103 X=Y?  
104 "1-MONDAY"  
105 RDN  
106 2  
107 X=Y?  
108 "1-TUESDAY"  
109 RDN  
110 3  
111 X=Y?  
112 "1-WEDNESDAY"  
113 RDN  
114 4  
115 X=Y?  
116 "1-THURSDAY"  
117 RDN  
118 5  
119 X=Y?  
120 "1-FRIDAY"  
121 RDN  
122 6  
123 X=Y?

124 "SATURDAY"  
125 "1."  
126 XEQ "OUT"  
127 ADV  
128 "THE HP-41 CAN E"  
129 "1-EVEN ACT"  
130 XEQ "OUT"  
131 "AS A DESK CLOCK"  
132 "1."  
133 XEQ "OUT"  
134 ADV  
135 CLST  
136 TIME  
137 .0020  
138 HMS+  
139 "1-1RTN"  
140 XYZALN  
141 "WATCH THE DISPL"  
142 "1-AY."  
143 XEQ "OUT"  
144 SF 29  
145 MDY  
146 CLOCK  
147 .END.

01\*LBL "CHRONO"  
02 CF 21  
03 "SEE PRINTER"  
04 FS? 55  
05 AVIEW  
06 FS? 55  
07 SF 21  
08 2  
09 SELECT  
10 CF 29  
11 CLX  
12 SETSW  
13 RUNSW  
14 SF 29  
15 "DISPLAY, FROM L"  
16 "LEFT TO"  
17 XEQ "OUT"  
18 "RIGHT, INDICATE"  
19 "FS HOURS, "  
20 XEQ "OUT"  
21 "MINUTES, SECOND"  
22 "FS,"  
23 XEQ "OUT"  
24 "HUNDREDTHS AND "  
25 "REGISTER"  
26 XEQ "OUT"  
27 "INTO WHICH A SP"  
28 "FLIT"  
29 XEQ "OUT"  
30 "WILL BE STORED."  
31 XEQ "OUT"  
32 ADV  
33 "START/STOP ST"  
34 "STOPWATCH"  
35 XEQ "OUT"  
36 "R/S"  
37 XEQ "012"  
38 ADV  
39 "TAKE/STORE SPLI"  
40 "ITS"  
41 XEQ "OUT"  
42 "ENTER"  
43 XEQ "012"  
44 ADV  
45 "SPLIT RCL MODE-"  
46 XEQ "OUT"  
47 "RCL"  
48 XEQ "012"  
49 "NEXT/PREVIOUS S"  
50 "FPLIT-"  
51 XEQ "OUT"  
52 "SST/BST"  
53 XEQ "012"  
54 ADV

55 "CLEAR/EXIT STOP"  
56 "WATCH"  
57 XEQ "OUT"  
58 "MODE:"  
59 XEQ "OUT"  
60 "BACK ARROW"  
61 SF 12  
62 ACA  
63 3  
64 ACCHR  
65 PRBUF  
66 CF 12  
67 ADV  
68 ADV  
69 "THE STOPWATCH H"  
70 "HAS BEEN"  
71 XEQ "OUT"  
72 "RUNNING SINCE T"  
73 "THIS DEMO"  
74 XEQ "OUT"  
75 "STARTED."  
76 XEQ "OUT"  
77 ADV  
78 "THE ELAPSED TIM"  
79 "E, SO"  
80 XEQ "OUT"  
81 "FAR, IS "  
82 RCLSW  
83 FIX 2  
84 1 E4  
85 \*  
86 ARCL X  
87 "1 SECONDS."  
88 XEQ "OUT"  
89 ADV  
90 CLX  
91 SETSW  
92 "NOW, TRY THE ST"  
93 "STOPWATCH."  
94 XEQ "OUT"  
95 ADV  
96 "START IT"  
97 XEQ "OUT"  
98 ADV  
99 "TAKE SPLITS"  
100 XEQ "OUT"  
101 ADV  
102 "STOP IT"  
103 XEQ "OUT"  
104 ADV  
105 "REVIEW THE SPLI"  
106 "ITS."  
107 XEQ "OUT"  
108 ADV  
109 "CLEAR STOPWATCH"  
110 "F MODE"  
111 XEQ "OUT"

112 "BY PRESSING SHI"  
113 "FT THEN"  
114 XEQ "OUT"  
115 "BACK ARROW."  
116 XEQ "OUT"  
117 ADV  
118 ADV  
119 ADV  
120 ADV  
121 STOPSW  
122 CLX  
123 SETSW  
124 SW  
125 CF 21  
126 "END DEMO"  
127 AVIEW  
128 SF 21  
129 RTN  
130 .END.

01\*LBL "ALARM"  
02 CF 21  
03 "SEE PRINTER"  
04 AVIEW  
05 SF 21  
06 1  
07 SELECT  
08 "ALARM CAPABILIT"  
09 "FIES ALLOW"  
10 XEQ "OUT"  
11 "THE HP-41 TO AC"  
12 "T AS AN"  
13 XEQ "OUT"  
14 "ALARM CLOCK."  
15 XEQ "OUT"  
16 ADV  
17 "HEAR THE TONES?"  
18 XEQ "OUT"  
19 BEEP  
20 BEEP  
21 BEEP  
22 BEEP  
23 ADV  
24 "MESSAGE ALARMS "  
25 "TADD A"  
26 XEQ "OUT"  
27 "PROMPT TO THE T"  
28 "TONES LIKE"  
29 XEQ "OUT"  
30 "THE ONES IN THE"  
31 "T DISPLAY."  
32 XEQ "OUT"  
33 ADV  
34 CF 21  
35 "GOOD MORNING"  
36 AVIEW  
37 BEEP  
38 PSE  
39 PSE  
40 PSE  
41 "WIFES BIRTHDAY"  
42 AVIEW  
43 BEEP  
44 "MEETING WITH BO"  
45 "FSS"  
46 AVIEW  
47 BEEP  
48 ADV  
49 "LABEL ALARMS AL"  
50 "FLOW THE"  
51 XEQ "OUT"

52 "HP-41 TO RUN "  
53 "T-A SELECTED"  
54 XEQ "OUT"  
55 "PROGRAM AT A "  
56 "T-PRESET"  
57 XEQ "OUT"  
58 "TIME."  
59 XEQ "OUT"  
60 ADV  
61 "THE HP-41 WILL "  
62 "T-NOW SET"  
63 XEQ "OUT"  
64 "AN ALARM, TURN "  
65 "T-ITSELF"  
66 XEQ "OUT"  
67 "OFF, AND START "  
68 "T-RUNNING"  
69 XEQ "OUT"  
70 "AGAIN IN 10 "  
71 "T-SECONDS"  
72 XEQ "OUT"  
73 "WHEN THE ALARM "  
74 "T-GOES OFF."  
75 XEQ "OUT"  
76 ADV  
77 ADV  
78 ADV  
79 PSE  
80 PSE  
81 "WATCH THE DISPL"  
82 "TAY."  
83 XEQ "OUT"  
84 BEEP  
85 "IM TURNING OFF"  
86 CF 21  
87 AVIEW  
88 CLX  
89 ENTER↑  
90 ENTER↑  
91 ENTER↑  
92 "TALM"  
93 TIME  
94 .0010  
95 HMS+  
96 XYZALM  
97 OFF  
98\*LBL "ALM"  
99 "I AM BACK"  
100 CF 21  
101 AVIEW  
102 BEEP  
103 PSE  
104 GTO "RTN"  
105 .END.

91 Regs P. 1/1  
XFUNC

01\*LBL "XFUNC"  
02 1  
03 SELECT  
04 CF 21  
05 "SEE PRINTER"  
06 AVIEW  
07 SF 21  
08 " ENTER YOUR"  
09 XEQ 01  
10 " NAME AND"  
11 XEQ 01  
12 " PRESS R/S."  
13 XEQ 01  
14 AON  
15 STOP  
16 AOFF  
17 XEQ "ST"  
18 " YOUR NAME"  
19 XEQ 01  
20 RCL 01  
21 4  
22 X\*Y?  
23 GTO 04  
24 " IS A"  
25 XEQ 01  
26 " 4 LETTER"  
27 XEQ 01  
28 " WORD."  
29 XEQ 01  
30 GTO 05  
31\*LBL 04  
32 " HAS"  
33 XEQ 01  
34 RCL 01  
35 FIX 0  
36 CF 29  
37 " "  
38 ARCL X  
39 "+ LETTERS."  
40 XEQ 01  
41\*LBL 05  
42 GTO "NMEA"  
43\*LBL "ST"  
44 CF 22  
45 ANUM  
46 FC? 22  
47 GTO 06  
48\*LBL 10  
49 " THATS NOT"  
50 XEQ 01  
51 " A NAME"  
52 XEQ 01  
53 PSE  
54 " TRY AGAIN"  
55 XEQ 01  
56 AON  
57 STOP

58 AOFF  
59 GTO "ST"  
60\*LBL 06  
61 ALENG  
62 STO 01  
63 1  
64 +  
65 1000  
66 /  
67 2  
68 +  
69 STO 00  
70\*LBL 03  
71 ATOX  
72 STO IND 00  
73 65  
74 X>Y?  
75 GTO 10  
76 RDN  
77 91  
78 X<=Y?  
79 GTO 10  
80 ISG 00  
81 GTO 03  
82 RTN  
83\*LBL "NMEA"  
84 " BACKWARDS."  
85 XEQ 01  
86 " YOU ARE"  
87 XEQ 01  
88 XEQ "BA"  
89 ASTO 30  
90 XEQ 01  
91 PSE  
92 " SCRAMBLED."  
93 XEQ 01  
94 " YOU ARE"  
95 XEQ 01  
96 XEQ "SC"  
97 RCL 30  
98 ENTER↑  
99 ASTO X  
100 X\*Y?  
101 GTO 12  
102 1  
103 AROT  
104\*LBL 12  
105 XEQ 01  
106 PSE  
107 " A SONG"  
108 XEQ 01  
109 " BASED ON"  
110 XEQ 01  
111 "YOUR NAME IS:"  
112 XEQ 01  
113 1  
114 SIN  
115 XEQ "MU"  
116 " WAIT"  
117 AVIEW  
118 SF 29  
119 "SN"  
120 READP

121\*LBL "SC"  
122 CLA  
123 RCL 01  
124 1.001  
125 +  
126 STO 00  
127\*LBL 07  
128 RCL IND 00  
129 ENTER↑  
130 ENTER↑  
131 2  
132 MOD  
133 X=0?  
134 GTO 08  
135 AROT  
136\*LBL 08  
137 RDN  
138 XTOA  
139 DSE 00  
140 GTO 07  
141 RTN  
142\*LBL "BA"  
143 CLA  
144 RCL 00  
145 INT  
146 1  
147 -  
148 .001  
149 +  
150 STO 00  
151\*LBL 02  
152 RCL IND 00  
153 XTOA  
154 DSE 00  
155 GTO 02  
156 RTN  
157\*LBL "MU"  
158 RCL 01  
159 1  
160 +  
161 1000  
162 /  
163 2  
164 +  
165 STO 00  
166\*LBL 11  
167 RCL IND 00  
168 10  
169 /  
170 FRC  
171 10  
172 \*  
173 TONE IND X  
174 ISG 00  
175 GTO 11  
176 RTN  
177 RTN  
178\*LBL 01  
179 AVIEW  
180 38  
181 FACT  
182 RTN  
183 .END.

16



01+LBL "SN"  
 02 FIX 0  
 03 2.014  
 04 STO 00  
 05 "ENTER"  
 06 ASTO 02  
 07 "R/S"  
 08 ASTO 04  
 09 "ON"  
 10 ASTO 06  
 11 "GOLD"  
 12 ASTO 08  
 13 "R"  
 14 ASTO 10  
 15 "ASN"  
 16 ASTO 12  
 17 "PI"  
 18 ASTO 14  
 19 41  
 20 STO 03  
 21 84  
 22 STO 05  
 23 1  
 24 STO 07  
 25 31  
 26 STO 09  
 27 52  
 28 STO 11  
 29 32  
 30 STO 13  
 31 82  
 32 STO 15  
 33+LBL 02  
 34 "PRESS THE"  
 35 XEQ 01  
 36 "KEY"  
 37 XEQ 01  
 38 "THAT YOU"  
 39 XEQ 01  
 40 "WANT THE"  
 41 XEQ 01  
 42 "SIN FUNCTION"  
 43 XEQ 01  
 44 PSE  
 45 "ASSIGNED TO"  
 46 AVIEW  
 47 ADV  
 48 GETKEY  
 49 CLD  
 50 X=Y?  
 51 GTO 02  
 52 31  
 53 X=Y?  
 54 GTO 08  
 55 CLX  
 56 84  
 57 X=Y?  
 58 GTO 08  
 59 CLX  
 60 11  
 61 X=Y?  
 62 GTO 03

63+LBL 08  
 64 "BAD CHOICE"  
 65 XEQ 01  
 66 PSE  
 67 GTO 02  
 68+LBL 03  
 69 RDN  
 70 STO 01  
 71 "SIN"  
 72 PASH  
 73 "ITS DONE"  
 74 XEQ 01  
 75 "TO TRY IT"  
 76 XEQ 01  
 77 "PRESS AND"  
 78 XEQ 01  
 79 "HOLD THE KEY"  
 80 XEQ 01  
 81 PSE  
 82 SF 27  
 83 "PRESS R/S"  
 84 XEQ 01  
 85 "TO RESUME"  
 86 XEQ 01  
 87 30  
 88 FIX 3  
 89 CLD  
 90 STOP  
 91 "WAIT"  
 92 AVIEW  
 93 FIX 0  
 94 RCL 01  
 95 CLA  
 96 PASH  
 97+LBL 04  
 98 "NEW FEATURE"  
 99 XEQ 01  
 100 "ALLows"  
 101 XEQ 01  
 102 "KEY CODE"  
 103 XEQ 01  
 104 "RETRIEVAL"  
 105 XEQ 01  
 106 PSE  
 107 "LETS PLAY"  
 108 XEQ 01  
 109 "A GAME ON"  
 110 XEQ 01  
 111 "THE HP-41"  
 112 XEQ 01  
 113 "KEYBOARD"  
 114 XEQ 01  
 115 "WATCH THE"  
 116 XEQ 01  
 117 "DISPLAY"  
 118 AVIEW  
 119 PSE  
 120 TONE 9  
 121 TONE 9  
 122 TONE 9  
 123 0  
 124 STO 01

125+LBL 06  
 126 "PRESS THE"  
 127 XEQ 01  
 128 CLA  
 129 ARCL IND 00  
 130 "F KEY"  
 131 1  
 132 ST+ 00  
 133 AVIEW  
 134 40  
 135 FACT  
 136 CLD  
 137 GETKEY  
 138 RCL IND 00  
 139 X=Y?  
 140 GTO 05  
 141 "WRONG"  
 142 AVIEW  
 143 1  
 144 ST+ 01  
 145 TONE 0  
 146 GTO 07  
 147+LBL 01  
 148 AVIEW  
 149 45  
 150 FACT  
 151 RTN  
 152+LBL 05  
 153 "RIGHT"  
 154 AVIEW  
 155 TONE 8  
 156+LBL 07  
 157 ISG 00  
 158 GTO 06  
 159 7  
 160 RCL 01  
 161 -  
 162 STO 01  
 163 5  
 164 X=Y?  
 165 GTO 09  
 166 "VERY GOOD"  
 167 XEQ 01  
 168 PSE  
 169 GTO 10  
 170+LBL 09  
 171 "NICE TRY"  
 172 XEQ 01  
 173 PSE  
 174+LBL 10  
 175 "YOU MADE"  
 176 XEQ 01  
 177 PSE  
 178 CF 29  
 179 -  
 180 ARCL 01  
 181 "F OF 7"  
 182 XEQ 01  
 183 PSE  
 184 SF 29  
 185 "END DEMO"  
 186 AVIEW  
 187 GTO "EE"

188+LBL 01  
 189 AVIEW  
 190 45  
 191 FACT  
 192 RTN  
 193+LBL "R"  
 194 "SN"  
 195 READP  
 196 .END.

# CASSET 79 Regs.

18

```
01+LBL "CASSET"
02 1
03 SELECT
04 CF 21
05 "SEE PRINTER"
06 AVIEW
07 SF 21
08 "THE CASSETTE DR"
09 "FIVE"
10 XEQ "OUT"
11 "HANDLES HIGH QU"
12 "FALITY"
13 XEQ "OUT"
14 "MINI DATA CARTR"
15 "FIDGES"
16 XEQ "OUT"
17 "THAT CAN STORE "
18 "FUP TO"
19 XEQ "OUT"
20 "128K BYTES D"
21 "F INFOR"
22 XEQ "OUT"
23 "NATION"
24 XEQ "OUT"
25 ADV
26 "IT HAS A FILE B"
27 "FY NAME"
28 XEQ "OUT"
29 "DIRECTORY"
30 XEQ "OUT"
31 ADV
32 DIR
33 ADV
34 "YOU CAN STORE A"
35 "END READ:"
36 XEQ "OUT"
37 "--PROGRAMS"
38 XEQ "OUT"
39 "--DATA"
40 XEQ "OUT"
41 "--KEY ASSIGNMENT"
42 "FS"
43 XEQ "OUT"
44 "--CALCULATOR STR"
45 "FUS"
46 XEQ "OUT"
47 "--COMPLETE CALCU"
48 "FLATOR"
49 XEQ "OUT"
50 "CONTENT"
51 XEQ "OUT"
52 ADV
```

```
53 "YOU HAVE ALSO A"
54 "FVAILABLE"
55 XEQ "OUT"
56 "FOR YOUR CONVEN"
57 "FIENCE:"
58 XEQ "OUT"
59 "--SECURE/UNSECU"
60 "FE"
61 XEQ "OUT"
62 "--RENAME"
63 XEQ "OUT"
64 "--PURGE"
65 XEQ "OUT"
66 "--AUTOMATIC EXEC"
67 "FUTION"
68 XEQ "OUT"
69 "--VERIFY"
70 XEQ "OUT"
71 BEEP
72 RTN
73 .END.
```

## DM 78 Regs.

```
01+LBL "SELL"
02 CF 21
03 "WATCH DM"
04 AVIEW
05 "D2HI, IN THE"
06 XEQ 02
07 "D2HP 3468A"
08 XEQ 02
09 "D2MULTIMETER."
10 XEQ 02
11 "D2I CAN"
12 XEQ 02
13 "D2MEASURE"
14 XEQ 02
15 "D2DC VOLTS."
16 XEQ 02
```

```
17 "D2RMS AC VOLTS."
18 XEQ 02
19 "D22 AND 4 WIRE"
20 XEQ 02
21 "D2OHMS,"
22 XEQ 02
23 "D2DC CURRENT,"
24 XEQ 02
25 "D2AND RMS AC"
26 XEQ 02
27 "D2 CURRENT."
28 XEQ 02
29 "D2RESOLUTION --"
30 XEQ 02
31 "D23 1/2 TO"
32 XEQ 02
33 "D25 1/2 DIGITS,"
34 XEQ 02
35 "D2AND I HAVE"
36 XEQ 02
37 "D2THE NEW HPIL"
38 XEQ 02
39 "D2BUILT IN."
40 XEQ 02
41 XEQ 01
42 XEQ 01
43 XEQ 01
44 "D2END DEMO"
45 XEQ 02
46 "END DEMO"
47 AVIEW
48 SF 21
49 "D1"
50 OUTA
51 LOCAL
52 RTN
53+LBL 01
54 "D2BUY ME NOW"
55 BEEP
56 XEQ 02
57 "D2 "
58 OUTA
59 RTN
60+LBL 02
61 OUTA
62 "WATCH DM"
63 AVIEW
64 RTN
65+LBL "DM"
66 AUTOIO
67 CF 17
68 "HP3468A"
69 FINDID
70 X=0?
71 GTO 37
72 SELECT
73 REMOTE
74 GTO "SELL"
75+LBL 37
76 BEEP
77 "NO HP3468A"
78 "F IN LOOP"
79 ADV
80 XEQ "OUT"
81 ADV
82 RTN
83 .END.
```

01+LBL "VIDEO"  
02 SF 21  
03 CF 21  
04 "SEE VIDEO DSP"  
05 RVIEW  
06 1  
07 SELECT  
08 SF 17  
09 CLA  
10 27  
11 XTOA  
12 "E"  
13 OUTA  
14 XEQ "COFF"  
15 CLA  
16 XTOA  
17 "1/2"  
18 ASTO 13  
19 10  
20 XTOA  
21 1  
22 XTOA  
23 OUTA  
24 "\*\*\*INTRODUCING\*\*"  
25 OUTA  
26 CLA  
27 ARCL 13  
28 16  
29 XTOA  
30 3  
31 XTOA  
32 116  
33 XTOA  
34 104  
35 XTOA  
36 101  
37 XTOA  
38 ARCL 13  
39 13  
40 XTOA  
41 5  
42 XTOA  
43 200  
44 XTOA  
45 208  
46 XTOA  
47 160  
48 XTOA  
49 184  
50 XTOA  
51 178

52 XTOA  
53 177  
54 XTOA  
55 182  
56 XTOA  
57 179  
58 XTOA  
59 193  
60 XTOA  
61 OUTA  
62 CLA  
63 ARCL 13  
64 10  
65 XTOA  
66 6  
67 XTOA  
68 214  
69 XTOA  
70 233  
71 XTOA  
72 228  
73 XTOA  
74 229  
75 XTOA  
76 239  
77 XTOA  
78 160  
79 XTOA  
80 201  
81 XTOA  
82 238  
83 XTOA  
84 244  
85 XTOA  
86 229  
87 XTOA  
88 242  
89 XTOA  
90 230  
91 XTOA  
92 225  
93 XTOA  
94 227  
95 XTOA  
96 229  
97 XTOA  
98 OUTA  
99 CLA  
100 13  
101 XTOA  
102 10  
103 XTOA  
104 OUTA  
105 OUTA  
106 CF 17  
107 "KEY FEATURES:"  
108 OUTA

109 "1. HP-IL COMPAT"  
110 "IBLE"  
111 OUTA  
112 CLA  
113 "2. 32 CHARACTER"  
114 "LINES"  
115 OUTA  
116 "3. 16-LINE DISP"  
117 SF 17  
118 OUTA  
119 "LAY, 31 LINE"  
120 CF 17  
121 OUTA  
122 " MEMORY"  
123 OUTA  
124 "4. FULL CURSOR "  
125 "CONTROL"  
126 OUTA  
127 "5. "  
128 201  
129 XTOA  
130 206  
131 XTOA  
132 214  
133 XTOA  
134 197  
135 XTOA  
136 210  
137 XTOA  
138 211  
139 XTOA  
140 197  
141 XTOA  
142 160  
143 XTOA  
144 214  
145 XTOA  
146 201  
147 XTOA  
148 196  
149 XTOA  
150 197  
151 XTOA  
152 207  
153 XTOA  
154 OUTA  
155 "6. 95 DISPLAYAB"  
156 SF 17  
157 OUTA  
158 "LE CHARACTERS"  
159 OUTA  
160 CLA  
161 27  
162 XTOA  
163 "L"  
164 CF 17  
165 OUTA

166 PSE  
167 PSE  
168 PSE  
169\*LBL "CBA"  
170 SF 17  
171 XEQ "CD"  
172 XEQ "COFF"  
173 XEQ "CC"  
174 CLA  
175 27  
176 XTOA  
177 "I=" "  
178 ASTO 03  
179 CLA  
180 7  
181 XTOA  
182 ASTO 04  
183 22.012  
184 CLA  
185 ARCL 04  
186 "IH "  
187 ASTO 02  
188 XEQ 01  
189 22.013  
190 CLA  
191 ARCL 04  
192 "IP "  
193 ASTO 02  
194 XEQ 01  
195 22.014  
196 CLA  
197 ARCL 04  
198 "I- "  
199 ASTO 02  
200 XEQ 01  
201 22.015  
202 CLA  
203 ARCL 04  
204 "II "  
205 ASTO 02  
206 XEQ 01  
207 22.016  
208 CLA  
209 ARCL 04  
210 "IL "  
211 ASTO 02  
212 XEQ 01  
213 4  
214 1  
215 XEQ "XY"  
216 "H H PPPP "  
217 "I III L"  
218 OUTA  
219 5  
220 1  
221 XEQ "XY"  
222 SF 01  
223 6  
224 1

225\*LBL F  
226 FC? 01  
227 XEQ "XY"  
228 "H H P P "  
229 "I I L"  
230 OUTA  
231 FS?C 01  
232 GTO F  
233 7  
234 1  
235 XEQ "XY"  
236 "HHHHH PPPP ==="  
237 "I= I L"  
238 OUTA  
239 8  
240 1  
241 XEQ "XY"  
242 SF 01  
243 9  
244 1  
245\*LBL G  
246 FC? 01  
247 XEQ "XY"  
248 "H H P "  
249 "I I L"  
250 OUTA  
251 FS?C 01  
252 GTO G  
253 10  
254 1  
255 XEQ "XY"  
256 "H H P "  
257 "I III L"  
258 OUTA  
259 "LLLL"  
260 OUTA  
261 14  
262 1  
263 XEQ "XY"  
264 "END DEMO"  
265 SF 21  
266 AVIEW  
267 CF 17  
268 RTN  
269\*LBL 01  
270 CLA  
271 ARCL 03  
272 XTOA  
273 ARCL 02  
274 OUTA  
275 DSE X  
276 GTO 01  
277 RTN  
278\*LBL "CD"  
279 CLA  
280 27  
281 XTOA  
282 "IE"  
283 OUTA  
284 RTN

285\*LBL "COFF"  
286 CLA  
287 27  
288 XTOA  
289 "I<"  
290 OUTA  
291 RTN  
292\*LBL "XY"  
293 CLA  
294 27  
295 XTOA  
296 "I=" "  
297 RDN  
298 XTOA  
299 X<>Y  
300 XTOA  
301 OUTA  
302 RTN  
303\*LBL "CC"  
304 CLA  
305 27  
306 XTOA  
307 "IJ"  
308 OUTA  
309 ASTO 01  
310 RTN  
311 .END.

BCDEPR

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(21)

69 Regs

(i.e. Barcode printing)  
on Hp 82162A.

WAIT

```

01*LBL "BCDEPR"
02 " WAIT"
03 AVIEW
04 SF 21
05 XEQ 15
06 1
07 SELECT
08 "HP 82162A PRINT"
09 "PER ADDRESS?"
10 SF 16
11 PROMPT
12 SELECT
13 "WATCH PRINTER"
14 CF 21
15 CF 16
16 AVIEW
17 SF 21
18 ADV
19 ADV
20 "BAR CODE PRINT"
21 "FNC*"
22 PRA
23 ADV
24 FIX 2
25 82162
26 CLA
27 ARCL X
28 PRA
29 CLA
30 ARCL 10
31 XEQ 01
32 OUTA
33 XEQ 01
34 CLA
35 ADV
36 ADV
37 ARCL 08
38 SF 17
39 OUTA
40 "THIS FUNCTION "
41 OUTA
42 "SUPPORTED BY "
43 OUTA
44 "THE HP-41 PLOTT"
45 "PER ROM. "
46 OUTA

```

```

47 "A PRIMITIVE"
48 OUTA
49 "E IMPLEMENTATION"
50 OUTA
51 "N IS AVAILABLE "
52 OUTA
53 "AS A USER LIBRA"
54 OUTA
55 "RY PROGRAM."
56 OUTA
57 PRBUF
58 XEQ 01
59 CLA
60 ARCL 09
61 OUTA
62 CF 17
63 ADV
64 ADV
65 ADV
66 ADV
67 "END DEMO"
68 CF 21
69 AVIEW
70 SF 21
71 RTN
72*LBL 01
73 PSE
74 PSE
75 RTN
76*LBL 15
77 CLA
78 CLST
79 1
80 BLDSPC
81 82
82 BLDSPC
83 ARCL X
84 CLST
85 1
86 BLDSPC
87 3
88 BLDSPC
89 ARCL X
90 CLST
91 1
92 BLDSPC
93 107
94 BLDSPC
95 ARCL X
96 CLST
97 104
98 BLDSPC
99 ARCL X
100 CLST
101 33
102 BLDSPC
103 ARCL X
104 CLST
105 98

```

```

106 BLDSPC
107 ARCL X
108 ASTO 10
109 CLA
110 CLST
111 1
112 BLDSPC
113 124
114 BLDSPC
115 ARCL X
116 CLST
117 27
118 BLDSPC
119 ARCL X
120 CLST
121 38
122 BLDSPC
123 ARCL X
124 CLST
125 107
126 BLDSPC
127 ARCL X
128 CLST
129 49
130 BLDSPC
131 ARCL X
132 CLST
133 72
134 BLDSPC
135 ARCL X
136 ASTO 08
137 CLST
138 CLA
139 1
140 BLDSPC
141 124
142 BLDSPC
143 ARCL X
144 CLST
145 27
146 BLDSPC
147 ARCL X
148 CLST
149 38
150 BLDSPC
151 ARCL X
152 CLST
153 107
154 BLDSPC
155 ARCL X
156 CLST
157 48
158 BLDSPC
159 ARCL X
160 CLST
161 72
162 BLDSPC
163 ARCL X
164 ASTO 09
165 RTN
166 .END.

```

01+LBL "PRNT80"  
02 "HP82905B"  
03 FINDID  
04 SELECT  
05 SF 17  
06 CLA  
07 27  
08 XTOA  
09 38  
10 XTOA  
11 ASTO 01  
12 107  
13 XTOA  
14 "FIS"  
15 OUTA  
16 150  
17 SKPCOL  
18 SKPCOL  
19 SKPCOL  
20 SKPCOL  
21 SKPCOL  
22 "HP PRODUCTS"  
23 PRA  
24 CLA  
25 ARCL 01  
26 107  
27 XTOA  
28 "FOS"  
29 OUTA  
30 ADV  
31 ADV  
32 "DESCRIPTION"  
33 OUTA  
34 "  
35 OUTA  
36 "MODEL"  
37 OUTA  
38 "LIST PRICE"  
39 PRA  
40 ADV  
41 "HP-IL INTERFACE"  
42 OUTA  
43 "MODULE"  
44 OUTA  
45 "HP 82160A"  
46 OUTA  
47 "125.00"  
48 PRA  
49 "DIGITAL CASSETT"  
50 OUTA  
51 "E DRIVE"  
52 OUTA

53 "HP 82161A"  
54 OUTA  
55 "550.00"  
56 PRA  
57 "THERMAL PRINTER"  
58 OUTA  
59 "  
60 OUTA  
61 "HP 82162A"  
62 OUTA  
63 "495.00"  
64 PRA  
65 "VIDEO INTERFACE"  
66 OUTA  
67 "  
68 OUTA  
69 "HP 82163A"  
70 OUTA  
71 "295.00"  
72 PRA  
73 "80 COLUMN PRINT"  
74 OUTA  
75 "ER"  
76 OUTA  
77 "HP 82905B"  
78 OUTA  
79 "795.00"  
80 PRA  
81 CLA  
82 12  
83 XTOA  
84 OUTA  
85 CF 17  
86 1  
87 SELECT  
88 RTN  
89 .END.

01\*LBL "PLTR"  
02 SF 25  
03 XROM 17,25  
04 FS?C 25  
05 GTO 00  
06 "NO PLOTTER"  
07 CF 21  
08 AVIEW  
09 BEEP  
10 PSE  
11 PSE  
12 RTN  
13\*LBL 00  
14 4  
15 XROM 17,02  
16 90  
17 ENTER↑  
18 10  
19 XROM 17,21  
20 "INTRODUCING THE"  
21 SF 17  
22 XROM 17,11  
23 CF 17  
24 " NEW HP-41"  
25 XROM 17,11  
26 86  
27 ENTER↑  
28 10  
29 XROM 17,21  
30 "PLOTTER MODULE."  
31 "I NOW YOU"  
32 XROM 17,11  
33 "AND YOUR HP-41 "  
34 SF 17  
35 XROM 17,11  
36 CF 17  
37 "CAN CREATE"  
38 XROM 17,11  
39 78  
40 ENTER↑  
41 10  
42 XROM 17,21  
43 "LINE GRAPHS,DRA"  
44 "WINGS,BAR"  
45 XROM 17,11  
46 "CODE, TEXT....."  
47 XROM 17,11  
48 XROM 17,06  
49 CLST  
50 10  
51 R↑  
52 10  
53 XROM 17,30

54 5  
55 XROM 17,36  
56 XROM 17,38  
57 65  
58 ENTER↑  
59 55  
60 ENTER↑  
61 95  
62 XROM 17,15  
63 XROM 17,06  
64 RDN  
65 RDN  
66 5  
67 ENTER↑  
68 45  
69 XROM 17,15  
70 XROM 17,06  
71 15  
72 ENTER↑  
73 55  
74 ENTER↑  
75 15  
76 ENTER↑  
77 35  
78 XROM 17,15  
79 -360  
80 ENTER↑  
81 CHS  
82 ENTER↑  
83 -1  
84 ENTER↑  
85 CHS  
86 XROM 17,30  
87 FIX 0  
88 CF 29  
89 2.5  
90 XROM 17,02  
91 360  
92 ENTER↑  
93 CHS  
94 ENTER↑  
95 -180  
96 ENTER↑  
97 CLX  
98 XROM 17,19  
99 FIX 1  
100 1  
101 ENTER↑  
102 CHS  
103 ENTER↑  
104 CHS  
105 ENTER↑  
106 CLX  
107 XROM 17,20  
108 2  
109 XROM 17,22  
110 DEG  
111 -360.36020  
112\*LBL 06  
113 SIN  
114 LASTX  
115 D-R  
116 ST/ Y

117 CLX  
118 LASTX  
119 CLX  
120 LASTX  
121 XROM 17,26  
122 ISG X  
123 GTO 06  
124 1.5  
125 ENTER↑  
126 CLX  
127 XROM 17,21  
128 4  
129 XROM 17,02  
130 5  
131 XROM 17,16  
132 "<SIN X>/X"  
133 XROM 17,11  
134 1  
135 XROM 17,22  
136 75  
137 ENTER↑  
138 135  
139 ENTER↑  
140 55  
141 ENTER↑  
142 95  
143 XROM 17,15  
144 XROM 17,06  
145 2  
146 XROM 17,22  
147 -50  
148 ENTER↑  
149 150  
150 ENTER↑  
151 -25  
152 ENTER↑  
153 110  
154 XROM 17,30  
155 20  
156 ENTER↑  
157 CLX  
158 XROM 17,21  
159 100  
160 X<>Y  
161 XROM 17,05  
162 X<>Y  
163 ENTER↑  
164 XROM 17,05  
165 0  
166 X<>Y  
167 XROM 17,05  
168 CLX  
169 30  
170 XROM 17,05  
171 -15  
172 X<>Y  
173 XROM 17,05  
174 15  
175 ENTER↑  
176 0  
177 XROM 17,05  
178 45

179 ENTER†  
180 30  
181 XROM 17.05  
182 30  
183 XROM 17.05  
184 70  
185 XROM 17.05  
186 70  
187 XROM 17.05  
188 30  
189 XROM 17.05  
190 50  
191 X<>Y  
192 XROM 17.05  
193 20  
194 ENTER†  
195 0  
196 XROM 17.05  
197 80  
198 ENTER†  
199 50  
200 XROM 17.21  
201 5  
202 XROM 17.02  
203 1  
204 XROM 17.22  
205 "HP-IL"  
206 XROM 17.11  
207 75  
208 ENTER†  
209 135  
210 ENTER†  
211 5  
212 ENTER†  
213 45  
214 XROM 17.15  
215 CLST  
216 10  
217 STO Z  
218 XROM 17.30  
219 XROM 17.06  
220 90  
221 XROM 17.12  
222 1  
223 XROM 17.16  
224 ENTER†  
225 2  
226 XROM 17.21  
227 3  
228 XROM 17.02  
229 "HP"  
230 XROM 17.11  
231 XROM 18.12  
232 XROM 18.11  
233 1  
234 ENTER†  
235 4  
236 XROM 17.21

237 "-41 "  
238 XROM 17.11  
239 XROM 18.13  
240 XROM 18.11  
241 1  
242 ENTER†  
243 6  
244 XROM 17.21  
245 "BAR "  
246 XROM 17.11  
247 XROM 18.13  
248 XROM 18.11  
249 1  
250 ENTER†  
251 8  
252 XROM 17.21  
253 "CODE"  
254 XROM 17.11  
255 XROM 18.13  
256 XROM 18.11  
257 XROM 17.31  
258 74  
259 ENTER†  
260 41  
261 XROM 17.21  
262 15  
263 ENTER†  
264 .6  
265 ENTER†  
266 4  
267 XROM 17.03  
268 CLX  
269 XROM 17.12  
270 CLA  
271 "AND MORE."  
272 XROM 17.11  
273 2  
274 XROM 17.22  
275 68  
276 ENTER†  
277 30  
278 XROM 17.21  
279 15  
280 ENTER†  
281 .6  
282 ENTER†  
283 5  
284 XROM 17.03  
285 CLX  
286 "\* EASILY"  
287 XROM 17.11  
288 "\* QUICKLY"  
289 XROM 17.11  
290 "\* INEXPENSIVELY"  
291 XROM 17.11  
292 CLX  
293 XROM 17.22  
294 ENTER†  
295 XROM 17.21  
296 XROM 18.01  
297 .END.



01+LBL "GPIOX"  
 02 "THE HP82165A AN"  
 03 "TD THE"  
 04 XEQ "OUT"  
 05 "HP82166A GPIO I"  
 06 "INTERFACES"  
 07 XEQ "OUT"  
 08 "CAN BE CONFIGUR"  
 09 "TED UNDER"  
 10 XEQ "OUT"  
 11 "SOFTWARE CONTRO"  
 12 "L"  
 13 XEQ "OUT"  
 14 "TO ONE OF SEVER"  
 15 "IAL "  
 16 XEQ "OUT"  
 17 "CONFIGURATIONS:"  
 18 XEQ "OUT"  
 19 ADV  
 20 "-TWO 8 BIT"  
 21 XEQ "OUT"  
 22 " BI/UNIDIRECTIO"  
 23 "INAL PORTS"  
 24 XEQ "OUT"  
 25 "-ONE 16 BIT"  
 26 XEQ "OUT"  
 27 " BI/UNIDIRECTIO"  
 28 "INAL PORT"  
 29 XEQ "OUT"  
 30 ADV  
 31 "HANDSHAKES INCL"  
 32 "UDE:"  
 33 XEQ "OUT"  
 34 "-FULL"  
 35 XEQ "OUT"  
 36 "-VALID/ACCEPTED"  
 37 XEQ "OUT"  
 38 "-READY/VALID"  
 39 XEQ "OUT"  
 40 "-STROBED OUTPUT"  
 41 XEQ "OUT"  
 42 ADV  
 43 ADV  
 44 "EACH GPIO INTER"  
 45 "FACE "  
 46 XEQ "OUT"  
 47 "INCORPORATES ON"  
 48 "E"  
 49 XEQ "OUT"  
 50 "32 BYTE FIFO BU"  
 51 "FFER FOR"

52 XEQ "OUT"  
 53 "INCREASED THROU"  
 54 "T-INPUT"  
 55 XEQ "OUT"  
 56 ADV  
 57 ADV  
 58 "APPLICATIONS:"  
 59 XEQ "OUT"  
 60 ADV  
 61 "--THE 82165A CAN"  
 62 "T CONNECT"  
 63 XEQ "OUT"  
 64 "TO MANY PERSONA"  
 65 "L"  
 66 XEQ "OUT"  
 67 "COMPUTERS OVER "  
 68 "THEIR"  
 69 XEQ "OUT"  
 70 "PARALLEL PRINTE"  
 71 "R"  
 72 XEQ "OUT"  
 73 "INTERFACE THUS "  
 74 "GIVING"  
 75 XEQ "OUT"  
 76 "YOUR MACHINE HP"  
 77 "IL"  
 78 XEQ "OUT"  
 79 "CAPABILITY."  
 80 XEQ "OUT"  
 81 " ALSO, IT CAN"  
 82 "T BE"  
 83 XEQ "OUT"  
 84 "CONNECTED TO MO"  
 85 "ST"  
 86 XEQ "OUT"  
 87 "PRINTERS AVAILA"  
 88 "BLE"  
 89 XEQ "OUT"  
 90 "ALLOWING YOUR S"  
 91 "TANDARD"  
 92 XEQ "OUT"  
 93 "SIZED PRINTER T"  
 94 "HAT YOU"  
 95 XEQ "OUT"  
 96 "MAY ALREADY OWN"  
 97 "T TO DO"  
 98 XEQ "OUT"  
 99 "YOUR PRINTING."  
 100 XEQ "OUT"  
 101 ADV  
 102 "--THE 82166A IS "  
 103 "T MEANT FOR"  
 104 XEQ "OUT"

105 "OEM CUSTOMERS W"  
 106 "HO WISH"  
 107 XEQ "OUT"  
 108 "TO DESIGN HPIL "  
 109 XEQ "OUT"  
 110 "CAPABILITIES IN"  
 111 "TO THEIR "  
 112 XEQ "OUT"  
 113 "PRODUCTS WITH M"  
 114 "FINAL"  
 115 XEQ "OUT"  
 116 "DEVELOPMENT CO"  
 117 "STS AND"  
 118 XEQ "OUT"  
 119 "HP SUPPORT."  
 120 XEQ "OUT"  
 121 ADV  
 122 ADV  
 123 ADV  
 124 ADV  
 125 "END DEMO"  
 126 XEQ "OUT"  
 127 XEQ "RTN"  
 128 .END.